INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

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Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

February 16, 2004

TO: Interested Parties / Applicant

RE: Dalton Corp. Warsaw Manufacturing Facility / 085-18455-00003

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-AM.dot 9/16/03

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Mr. Jim Paternoster
Dalton Corporation Warsaw Manufacturing Facility
P.O. Box 1388
Warsaw, Indiana 46581-1388

February 16, 2004

Re: 085-18455
Second Administrative Amendment to
Part 70 Significant Source Modification No.
085-14027-00003

Dear Mr. Paternoster:

Dalton Corporation Warsaw Manufacturing Facility was issued a Part 70 Significant Source Modification permit on February 22, 2002 for a hot box core making process and two (2) core ovens. A letter requesting to update pressure drop ranges across various baghouses, water flow rates for various wet collectors, and identification numbers assigned to all control devices and to correct typographical errors was received on December 1, 2003. Pursuant to the provisions of 2-7-11 the permit is hereby administratively amended as follows:

1. The facility description in section D.3 has been revised as follows:

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

One (1) cupola constructed prior to 1977, with a nominal rate of 48.5 tons of metal melted per hour and a maximum heat input capacity from coke of 69.95 million Btu per hour, with emissions controlled by wet scrubber A and two natural gas-fired afterburners ~~and~~ **which** exhaust~~ing~~ to stack A, and also with charge door emissions controlled by baghouse ~~A~~ **#14 which exhausts to stack AD**;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

2. Condition D.3.14(e) is revised to include the correct reference to the parametric monitoring condition D.3.11 and to more accurately describe what records must be kept as follows:

D.3.14 Record Keeping Requirements

(e) To document compliance with Condition D.3.~~10~~**11**, the Permittee shall maintain records of the ~~inlet and outlet differential~~ **total** static pressure **drop across the baghouse** once per shift ~~during normal operation~~ **when the associated process is in operation when venting to the atmosphere**.

3. The facility descriptions in section D.5 have been revised as follows:

SECTION D.5 FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(1) One (1) Herman 1 and Pallet Line shakeout process, constructed prior to 1977, with a maximum capacity of 46.5 tons of metal per hour and 308 tons of core and molding sand per hour, with emissions controlled by ~~scrubber C~~ **Wet Collector #2,** and exhausting to stack C;

(2) One (1) Herman 1 and Pallet Line mold sand handling process, constructed prior to 1977, with a maximum capacity of 300 tons of molding sand per hour, with emissions controlled by ~~scrubbers B and C~~ **Wet Collectors #3 and #2**, and exhausting to stacks B and C respectively;

(3) One (1) Herman 2 shakeout process, constructed prior to 1977, with a maximum capacity of 37 tons of metal per hour and 166 tons of core and molding sand per hour, with emissions controlled by ~~scrubber B~~ **Wet Collector #3** and exhausting to stack B;

(4) Herman 2 mold sand handling operations constructed prior to 1977, with a maximum capacity of 150 tons of molding sand per hour, with emissions controlled by baghouse ~~F~~ **#1**, and baghouse ~~Y~~ **#13** and exhausting to stacks F and Y, respectively;

(5) One (1) Herman 3 shakeout process, constructed prior to 1977 and modification permitted in 1991, with a maximum capacity of 28 tons of metal per hour and 165 tons of core and molding sand per hour, with emissions controlled by ~~scrubber E~~ **Wet Collector #4** and baghouse ~~W~~ **#11** and exhausting to stack E and W respectively;

(6) Herman 3 molding sand handling operations constructed prior to 1977 and modification permitted in 1991, with **a** maximum capacity of 150 tons of molding sand per hour, with emissions controlled by ~~scrubbers D and E~~ **Wet Collectors #1 and #4**, and baghouse ~~W~~ **#11**, and exhausting to stacks D, E and W, respectively;

(7) One (1) waste sand transport process, constructed prior to 1977, with a maximum capacity of 20 tons of waste sand per hour, with emissions controlled by baghouses ~~G~~ **#2** and ~~R~~ **#9** and exhausting to stacks G and R, respectively;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

4. Conditions D.5.4 and D.5.5 are revised to read as follows:

D.5.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

Within 18 months after startup of the new hot box core making process, the Permittee shall perform PM and PM10 testing on baghouse ~~F~~ **#1**, baghouse ~~Y~~ **#13** and ~~scrubber B~~ **Wet Collector #3** controlling Herman 2 shakeout and sand handling processes using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.5.1. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance. Testing shall be conducted in accordance with Section C – Performance Testing. PM10 includes filterable and condensible PM10.

D.5.5 Emission Controls

(a) The ~~wet scrubber C~~ **Wet Collector #2** for PM control shall be in operation and control emissions from the Herman 1 and Pallet Line shakeout and sand handling at all times that either of these processes is in operation.

(b) The bin vent shall be in place at all times that Herman 1 and Pallet Line sand handling are in operation.

(c) The ~~wet scrubber B~~ **Wet Collector #3** for PM control shall be in operation and control emissions from the Herman 2 shakeout, the Herman 1 and Pallet Line mold sand handling, and the Herman 2 mold sand handling at all times that any of these processes is in operation.

(d) The baghouses ~~F~~ **#1** and ~~Y~~ **#13** for PM control shall be in operation and control emissions from the Herman 2 mold sand handling at all times that the Herman 2 mold sand handling is in operation.

(e) The baghouse ~~W~~ **#11** and ~~wet scrubber E~~ **Wet Collector #4** for PM control shall be in operation and control emissions from Herman 3 shakeout or mold sand handling at all times that either of these processes is in operation.

(f) The baghouse ~~W~~ **#11** and ~~wet scrubbers D and E~~ **Wet Collectors #1 and #4** for PM control shall be in operation and control emissions from the Herman 3 mold sand handling at all times that the Herman 3 mold sand handling is in operation.

(g) The baghouses ~~G~~ **#2** and ~~R~~ **#9** for PM control shall be in operation and control emissions from the waste sand transport system at all times that the waste sand transport system is in operation.

5. Conditions D.5.6, D.5.7, D.5.8, D.5.9, D.5.10, and D.5.13 are revised to read as follows:

D.5.6 Visible Emissions Notations

(a) Visible emission notations of the ~~wet scrubbers B, C, D, E~~ **Wet Collectors #3, #2, #1, #4** and baghouses ~~F, G, R, W and Y~~ **#1, #2, #9, #11 and #13** stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere and when the associated processes are in operation. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a ~~violation of~~ **deviation from** this permit.

D.5.7 ~~Scrubber~~ **Wet Collector** Parametric Monitoring

The Permittee shall record the total static pressure drop and flow rate of ~~scrubbers B, C, D and E~~ **Wet Collectors #3, #2, #1 and #4** used in conjunction with the Herman 1, Pallet line, Herman 2 and Herman 3 shakeout processes and Herman 1, Pallet line, Herman 2 and Herman 3 mold sand handling processes, at least once per shift when the associated processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the wet ~~scrubber~~ **collector** is below a minimum of 8 inches of water or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Failure to Take Response Steps. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the flow rate shall be maintained at a minimum of ~~225~~ **200** gallons per minute or a minimum flow rate established during the latest stack test. A pressure reading or flow rate that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C –Compliance Response Plan - Failure to Take Response Steps, shall be considered a ~~violation of~~ **deviation from** this permit.

The instruments used for determining the pressures and flow rates shall comply with Section C – Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.5.8 ~~Scrubber~~ **Wet Collector** Inspections

An inspection shall be performed each calendar quarter of the ~~scrubbers B, C, D and E~~ **Wet Collectors #3, #2, #1 and #4**. All defective ~~scrubber~~ **wet collector** parts shall be replaced.

D.5.9 ~~Scrubber~~ **Wet Collector** Failure

In the event that ~~scrubber~~ **wet collector** failure has been observed:

(a) The affected process will be shut down immediately until the failed unit has been replaced. Failure to take response steps in accordance with Section C – Compliance Response Plan - Failure to Take Response Steps, shall be considered a ~~violation of~~ **deviation from** this permit.

(b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.

D.5.10 Baghouse Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses ~~F, G, R, W and Y~~ **#1, #2, #9, #11 and #13** used in conjunction with the Herman 2 and Herman 3 mold sand handling, Herman 3 shakeout process and the waste sand transport processes, at least once per shift when the associated processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across **either of** the baghouses **identified as #9 and #13** is outside the range of ~~4.0~~ **2.0** and ~~10.0~~ **8.0** inches of water or a range established during the latest stack test, **or the pressure drop across any of the baghouses identified as #1, #2, and #11 is outside the range of 4.0 and 10.0 inches of water or a range established during the latest stack test,** the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a ~~violation of~~ **deviation from** this permit.

The instruments used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.5.13 Record Keeping Requirements

(a) To document compliance with condition D.5.1, the permittee shall maintain records of the sand handled and the waste sand transported each month.

(b) To document compliance with Condition D.5.6, the Permittee shall maintain records of visible emission notations of the baghouses and wet ~~scrubbers~~ **collectors** stack exhausts once per shift during normal daylight hours when exhausting to the atmosphere and when the Pallet, Herman 1, Herman 2 and Herman 3 molding lines and waste sand transport are in operation.

(c) To document compliance with Condition D.5.7, the Permittee shall maintain records of the pressure drop and flow rate readings of the ~~scrubbers~~ **wet collectors** once per shift when the Pallet, Herman 1, Herman 2 and Herman 3 molding lines and waste sand transport are in operation.

(d) To document compliance with Condition D.5.10, the Permittee shall maintain records of the ~~inlet and outlet differential~~ **total** static pressure **drop** once per shift ~~during normal operation~~ **when the associated processes are in operation when venting to the atmosphere**.

(e) To document compliance with Conditions D.5.8 and D.5.11, the Permittee shall maintain records of the results of the inspections required and the number and type of any parts replaced.

(f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

6. The facility descriptions in section D.6 have been revised as follows:

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(1) One (1) SB-1 shot blast machine, constructed prior to 1977, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse ~~H~~ **#3**;
(2) One (1) SB-2 shot blast machine, constructed prior to 1977, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse ~~H~~ **#3**;
(3) One (1) SB-3 shot blast machine, constructed in 1981, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse ~~H~~ **#3**;
(4) One (1) SB-4 shot blast machine, constructed prior to 1977, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse ~~H~~ **#3**;
(5) One (1) SB-5 shot blast machine, constructed prior to 1977, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse ~~AG~~ **#16**;
(6) One (1) SB-6 shot blast machine, constructed in 1981, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse ~~AG~~ **#16**;
(7) One (1) SB-7 Pangborn shot blast machine, constructed in 1978, with a maximum capacity of 6.0 tons of iron castings per hour, with emissions controlled by baghouse ~~K~~ **#6**;
(8) One (1) SB-8 shot blast machine, constructed in 1988, with a maximum capacity of 8.0 tons of iron castings per hour, with emissions controlled by baghouse ~~AG~~ **#16**;
(9) One (1) SB-9 shot blast machine, constructed in 1995, with a maximum capacity of 12.5 tons of iron castings per hour, with emissions controlled by baghouse ~~X~~ **#12**;
(10) Grinders GR1 through GR10, GR25, GR 29 and GR30, each with a maximum capacity of 4.0 tons of iron castings per hour, with emissions controlled by baghouse ~~AD~~ **#15**;
(11) Grinders GR11 through GR14, GR16 and GR17 each with a maximum capacity of 4.0 tons of iron castings per hour, with emissions controlled by baghouse ~~AG~~ **#16**;
(12) Grinders GR19 through GR23 and Grinders 34 through 36 each with a maximum capacity of 4.0 tons of iron castings per hour, with emissions controlled by baghouse ~~K~~ **#6**;
(13) Grinders GR31 through GR33, each with a maximum capacity of 4.0 tons of iron castings per hour, with emissions controlled by baghouse ~~X~~ **#12**.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

7. Condition D.6.2(b) has been revised to correct the allowable particulate emission rate for SB-3, SB-6, and SB-8 based on the correct process weight rates as follows:

D.6.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the following conditions shall apply:

(b) The particulate matter (PM) emissions from each of the shot blast machines SB-3, SB-6, and SB-8 shall not exceed ~~8.56~~ **12.1, 12.1, and 16.5** pounds per hour**, respectively** ~~each~~ when operating at ~~a~~ process weight rate**s** of ~~3.0~~ **5.0, 5.0, and 8.0** tons of iron castings per hour**,** ~~each~~ **respectively**.

8. Conditions D.6.4, D.6.5, D.6.6, and D.6.9 are revised to read as follows:

D.6.4 Emission Controls

(a) The baghouse ~~H~~ **#3** for PM control shall be in operation and control emissions from the shotblasters SB-1, SB-2, SB-3, and SB-4 at all times that any one of these shotblasters is in operation.

(b) The baghouse ~~AG~~ **#16** for PM control shall be in operation and control emissions from the shotblasters SB-5, SB-6, and SB-8 at all times that any one of these shotblasters is in operation.

(c) The baghouse ~~K~~ **#6** for PM control shall be in operation and control emissions from the shotblaster SB-7 at all times that the shotblaster SB-7 is in operation.

(d) The baghouse ~~X~~ **#12** for PM control shall be in operation and control emissions from the shotblaster SB-9 at all times that the shotblaster SB-9 is in operation.

(e) The baghouse ~~AD~~ **#15** for PM control shall be in operation and control emissions from grinders GR1 through GR10, GR25, GR 29 and GR30 at all times that grinders GR1 through GR10, GR25, GR 29 and GR30 are in operation.

(f) The baghouse ~~AG~~ **#16** for PM control shall be in operation and control emissions from grinders GR11 through GR14, GR16 and GR17 at all times that grinders GR11 through GR14, GR16 and GR17 are in operation.

(g) The baghouse ~~K~~ **#6** for PM control shall be in operation and control emissions from grinders GR19 through GR23 and Grinders 34 through 36 at all times that grinders GR19 through GR23 and Grinders 34 through 36 are in operation.

(h) The baghouse ~~X~~ **#12** for PM control shall be in operation and control emissions from grinders GR31 through GR33 at all times that grinders GR31 through GR33 are in operation.

D.6.5 Visible Emissions Notations

(a) Visible emission notations of each of the baghouses ~~H, K, AG, and X~~ **#3, #6, #16, and #12** stack exhausts shall be performed once per shift during normal daylight hours when exhausting to the atmosphere and when the shotblasters are in operation. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a ~~violation of~~ **deviation from** this permit.

D.6.6 Baghouse Parametric Monitoring

The Permittee shall record the total static pressure drop across baghouses ~~H, K and X~~ **#3, #6 and #12** used in conjunction with shotblasters, at least once per shift when the associated processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across **either of** the baghouse**s identified as #6 and #12** is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest stack test, **or the pressure drop across the baghouse identified as #3 is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test,** the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is above the above mentioned maximum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a ~~violation of~~ **deviation from** this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.6.9 Record Keeping Requirements

(a) To document compliance with condition D.6.1 (d), the source shall maintain record of the total metal finished per month.

(b) To document compliance with Condition D.6.5, the Permittee shall maintain records of visible emission notations of the baghouse ~~H, AG, K, and X~~ **#3, #16, #6, and #12** stack exhausts once per shift when exhausting to the atmosphere and when the blasters are in operation.

(c) To document compliance with Condition D.6.6, the Permittee shall maintain records of the ~~inlet and outlet differential~~ **total** static pressure **drop** once per shift ~~during normal operation~~ **when the associated processes are in operation when venting to the atmosphere**.

(d) To document compliance with Conditions D.6.7, the Permittee shall maintain records of the results of the inspections required under Condition D.6.7.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

All other conditions of the Significant Source Modification to the Part 70 permit shall remain unchanged and in effect. Please find enclosed the revised pages of the Significant Source Modification. The amended Significant Source Modification to Part 70 Permit will be incorporated in the Part 70 operating Permit 085-6708-00003, before its issuance.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Trish Earls, at (973) 575-2555, ext. 3219 or dial (800) 451-6027, and ask for extension 3-6878.

Sincerely,
Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
TE/EVP
cc: File – Kosciusko County
U.S. EPA, Region V
Kosciusko County Health Department
Northern Regional Office
Air Compliance Section Inspector Doyle Houser
Compliance Data Section
Administrative and Development
Technical Support and Modeling - Michelle Boner

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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PART 70 SIGNIFICANT SOURCE MODIFICATION
OFFICE OF AIR QUALITY

Dalton Corporation Warsaw Manufacturing Facility
1900 East Jefferson Street
Warsaw, Indiana 46581-1388

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 085-14027-00003	
Original Signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: February 22, 2002

First Administrative Amendment No.: 085-15816-00003, issued August 23, 2002;

Second Administrative Amendment No.: 085-18455-00003	Pages Affected: 22, 25, 30 - 39
Issued by Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: Original signed by Paul Dubenetzky

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

One (1) cupola constructed prior to 1977, with a nominal rate of 48.5 tons of metal melted per hour and a maximum heat input capacity from coke of 69.95 million Btu per hour, with emissions controlled by wet scrubber A and two natural gas-fired afterburners which exhaust to stack A, and also with charge door emissions controlled by baghouse #14 which exhausts to stack AD;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Prevention of Significant Deterioration [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, the following conditions shall apply:

(a) The PM emissions from the cupola shall be limited to 0.821 pounds per ton metal.

(b) The PM10 emissions from the cupola shall be limited to 0.738 pounds per ton metal.

(c) The SO2 emissions from the cupola shall be limited to 1.25 pounds per ton metal.

(d) The NOx emissions from the cupola shall be limited to 0.1 pounds per ton metal.

(e) The VOC emissions from the cupola shall be limited to 0.009 pounds per ton metal.

(f) The CO emissions from the cupola shall be limited to 7.250 pounds per ton metal.

(g) The Lead emissions from the cupola shall be limited to 0.002 pounds per ton metal.

(h) The amount of metal melted in the Cupola shall be limited to 187,919 tons per twelve (12) consecutive month period.

Therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 shall not apply to the new hot box core making process.

D.3.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the total particulate matter (PM) from scrubber controlling the cupola and the baghouse controlling the charge door emissions shall not exceed 44.3 pounds per hour when operating at a process weight rate of 48.5 tons of metal melted per hour. Note: This limitation is for both the baghouse and the scrubber combined.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

The instrument used for determining the pressure shall comply with Section C – Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.12 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the cupola charge door when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.3.13 Broken or Failed Bag Detection

In the event that bag failure has been observed.

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.14 Record Keeping Requirements

(a) To document compliance with condition D.3.1 (h), the permittee shall maintain records of the metal melted in the cupola each month.

(b) To document compliance with Condition D.3.6, the Permittee shall maintain records of visible emission notations of the baghouse and wet scrubber stack exhausts once per shift during normal daylight hours when exhausting to the atmosphere during cupola operation.

(c) To document compliance with Condition D.3.7, the Permittee shall maintain records of the temperature of the upper stack of the cupola continuously.

(d) To document compliance with Condition D.3.8, the Permittee shall maintain records of the pressure drop and flow rate readings of the scrubber once per shift when the cupola is in operation.

(e) To document compliance with Condition D.3.11, the Permittee shall maintain records of the total static pressure drop across the baghouse once per shift when the associated process is in operation when venting to the atmosphere.

(f) To document compliance with Conditions D.3.9 and D.3.12, the Permittee shall maintain records of the results of the inspections required under Conditions D.3.9 and D.3.12 and the number and type of any parts replaced.

SECTION D.5 FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(1) One (1) Herman 1 and Pallet Line shakeout process, constructed prior to 1977, with a maximum capacity of 46.5 tons of metal per hour and 308 tons of core and molding sand per hour, with emissions controlled by Wet Collector #2, and exhausting to stack C;

(2) One (1) Herman 1 and Pallet Line mold sand handling process, constructed prior to 1977, with a maximum capacity of 300 tons of molding sand per hour, with emissions controlled by Wet Collectors #3 and #2, and exhausting to stacks B and C respectively;

(3) One (1) Herman 2 shakeout process, constructed prior to 1977, with a maximum capacity of 37 tons of metal per hour and 166 tons of core and molding sand per hour, with emissions controlled by Wet Collector #3 and exhausting to stack B;

(4) Herman 2 mold sand handling operations constructed prior to 1977, with a maximum capacity of 150 tons of molding sand per hour, with emissions controlled by baghouse #1, and baghouse #13 and exhausting to stacks F and Y, respectively;

(5) One (1) Herman 3 shakeout process, constructed prior to 1977 and modification permitted in 1991, with a maximum capacity of 28 tons of metal per hour and 165 tons of core and molding sand per hour, with emissions controlled by Wet Collector #4 and baghouse #11 and exhausting to stack E and W respectively;

(6) Herman 3 molding sand handling operations constructed prior to 1977 and modification permitted in 1991, with a maximum capacity of 150 tons of molding sand per hour, with emissions controlled by Wet Collectors #1 and #4, and baghouse #11, and exhausting to stacks D, E and W, respectively;

(7) One (1) waste sand transport process, constructed prior to 1977, with a maximum capacity of 20 tons of waste sand per hour, with emissions controlled by baghouses #2 and #9 and exhausting to stacks G and R, respectively;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Prevention of Significant Deterioration [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, the following conditions shall apply:

(a) The PM emissions from the Pallet line, Herman 1, Herman 2 and Herman 3 shakeout and sand handling processes shall be limited to 0.034 pounds per ton metal and sand each.

(b) The PM10 emissions from the Pallet line, Herman 1, Herman 2 and Herman 3 shakeout and sand handling processes shall be limited to 0.058 pounds per ton metal and sand each.

(c) The VOC emissions from the Pallet line, Herman 1, Herman 2 and Herman 3 shakeout and sand handling processes shall be limited to 0.115 pounds per ton metal and sand each.

(d) The lead emissions from the Pallet line, Herman 1, Herman 2 and Herman 3 shakeout and sand handling processes shall be limited to 0.00018 pounds per ton of metal each.

(e) The PM emissions from the waste sand transport process shall be limited to 0.072 pounds per ton sand each.

(f) The PM10 emissions from the waste sand transport process shall be limited to 0.011 pounds per ton sand each.

(g) The amount of core and mold sand handled for the entire source shall be limited to 1,127,516 tons of sand per twelve consecutive month period.

(h) The amount of sand throughput to the waste sand transport process shall be limited to 112,752 tons of sand per twelve consecutive month period.

Therefore, the requirements of 326 IAC 2-2 and 40 CFR 52.21 shall not apply to the new hot box core making process.

The Herman 3 molding line emission units covered by this condition have been referred to enforcement for allegedly violating PSD. The permit shield covered by 326 IAC 2-7-15 does not apply to this condition and compliance with this condition shall not be deemed compliance with 326 IAC 2-2 or 40 CFR 52.21.

D.5.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the following conditions shall apply:

(a) The particulate matter (PM) from the Herman 1 and Pallet Line shakeout operation shall not exceed 64.91 pounds per hour when operating at a process weight rate of 354.50 tons of sand and metal per hour.

(b) The particulate matter (PM) from the Herman 1 and Pallet Line mold sand handling operation shall not exceed 63.0 pounds per hour when operating at a process weight rate of 300 tons of molding sand per hour.

(c) The particulate matter (PM) from the Herman 2 shakeout operation shall not exceed 58.7 pounds per hour when operating at a process weight rate of 203 tons of sand and metal per hour.

(d) The particulate matter (PM) from the Herman 2 mold sand handling operation shall not exceed 55.4 pounds per hour when operating at a process weight rate of 150 tons of molding sand per hour.

(e) The particulate matter (PM) from Herman 3 shakeout operation shall not exceed 58.1 pounds per hour when operating at a process weight rate of 193 tons of sand and metal per hour.

(f) The particulate matter (PM) from Herman 3 mold sand handling operation shall not exceed 55.4 pounds per hour when operating at a process weight rate of 150 tons of molding sand per hour.

(g) The particulate matter (PM) from the baghouses G and R controlling the waste sand transport operation shall not exceed 30.5 pounds per hour when operating at a process weight rate of 20 tons of waste sand per hour.

Compliance with the limits in D.5.1 will also demonstrate compliance with this condition.

The pounds per hour limitations for (a) and (f) were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate greater than 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55 P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

The pounds per hour limitation for (i) was calculated with the following equation:

Interpolation of the data for the process weight rates less than or equal to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

Compliance Determination Requirements

D.5.4 Testing Requirements [326 IAC 2-7-6(1),(6)]

Within 18 months after startup of the new hot box core making process, the Permittee shall perform PM and PM10 testing on baghouse #1, baghouse #13 and Wet Collector #3 controlling Herman 2 shakeout and sand handling processes using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.5.1. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance. Testing shall be conducted in accordance with Section C – Performance Testing. PM10 includes filterable and condensible PM10.

D.5.5 Emission Controls

(a) The Wet Collector #2 for PM control shall be in operation and control emissions from the Herman 1 and Pallet Line shakeout and sand handling at all times that either of these processes is in operation.

(b) The bin vent shall be in place at all times that Herman 1 and Pallet Line sand handling are in operation.

(c) The Wet Collector #3 for PM control shall be in operation and control emissions from the Herman 2 shakeout, the Herman 1 and Pallet Line mold sand handling, and the Herman 2 mold sand handling at all times that any of these processes is in operation.

(d) The baghouses #1 and #13 for PM control shall be in operation and control emissions from the Herman 2 mold sand handling at all times that the Herman 2 mold sand handling is in operation.

(e) The baghouse #11 and Wet Collector #4 for PM control shall be in operation and control emissions from Herman 3 shakeout or mold sand handling at all times that either of these processes is in operation.

(f) The baghouse #11 and Wet Collectors #1 and #4 for PM control shall be in operation and control emissions from the Herman 3 mold sand handling at all times that the Herman 3 mold sand handling is in operation.

(g) The baghouses #2 and #9 for PM control shall be in operation and control emissions from the waste sand transport system at all times that the waste sand transport system is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.6 Visible Emissions Notations

(a) Visible emission notations of the Wet Collectors #3, #2, #1, #4 and baghouses #1, #2, #9, #11 and #13 stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere and when the associated processes are in operation. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a deviation from this permit.

D.5.7 Wet Collector Parametric Monitoring

The Permittee shall record the total static pressure drop and flow rate of Wet Collectors #3, #2, #1, and #4 used in conjunction with the Herman 1, Pallet line, Herman 2 and Herman 3 shakeout processes and Herman 1, Pallet line, Herman 2 and Herman 3 mold sand handling processes, at least once per shift when the associated processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across the wet collector is below a minimum of 8 inches of water or a minimum established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Failure to Take Response Steps. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the flow rate shall be maintained at a minimum of 200 gallons per minute or a minimum flow rate established during the latest stack test. A pressure reading or flow rate that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C –Compliance Response Plan - Failure to Take Response Steps, shall be considered a deviation from this permit.

The instruments used for determining the pressures and flow rates shall comply with Section C – Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.5.8 Wet Collector Inspections

An inspection shall be performed each calendar quarter of the Wet Collectors #3, #2, #1, and #4. All defective wet collector parts shall be replaced.

D.5.9 Wet Collector Failure

In the event that wet collector failure has been observed:

(a) The affected process will be shut down immediately until the failed unit has been replaced. Failure to take response steps in accordance with Section C – Compliance Response Plan - Failure to Take Response Steps, shall be considered a deviation from this permit.

(b) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion.

D.5.10 Baghouse Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses #1, #2, #9, #11 and #13 used in conjunction with the Herman 2 and Herman 3 mold sand handling, Herman 3 shakeout process and the waste sand transport processes, at least once per shift when the associated processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across either of the baghouses identified as #9 and #13 is outside the range of 2.0 and 8.0 inches of water or a range established during the latest stack test, or the pressure drop across any of the baghouses identified as #1, #2, and #11 is outside the range of 4.0 and 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a deviation from this permit.

The instruments used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.5.11 Baghouse Inspections

An inspection shall be performed each calendar quarter of all the bags controlling the Herman 1 and Pallet Line shakeout and mold sand handling emissions, Herman 3 mold sand handling emissions and the waste sand transport emissions. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.5.12 Broken or Failed Bag Detection

In the event that bag failure has been observed.

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.13 Record Keeping Requirements

(a) To document compliance with condition D.5.1, the permittee shall maintain records of the sand handled and the waste sand transported each month.

(b) To document compliance with Condition D.5.6, the Permittee shall maintain records of visible emission notations of the baghouses and wet collectors stack exhausts once per shift during normal daylight hours when exhausting to the atmosphere and when the Pallet, Herman 1, Herman 2 and Herman 3 molding lines and waste sand transport are in operation.

(c) To document compliance with Condition D.5.7, the Permittee shall maintain records of the pressure drop and flow rate readings of the wet collectors once per shift when the Pallet, Herman 1, Herman 2 and Herman 3 molding lines and waste sand transport are in operation.

(d) To document compliance with Condition D.5.10, the Permittee shall maintain records of the total static pressure drop once per shift when the associated processes are in operation when venting to the atmosphere.

(e) To document compliance with Conditions D.5.8 and D.5.11, the Permittee shall maintain records of the results of the inspections required and the number and type of any parts replaced.

(f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.14 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.5.1 (g) and D.5.1 (h) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(1) One (1) SB-1 shot blast machine, constructed prior to 1977, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse #3;
(2) One (1) SB-2 shot blast machine, constructed prior to 1977, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse #3;
(3) One (1) SB-3 shot blast machine, constructed in 1981, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse #3;
(4) One (1) SB-4 shot blast machine, constructed prior to 1977, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse #3;
(5) One (1) SB-5 shot blast machine, constructed prior to 1977, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse #16;
(6) One (1) SB-6 shot blast machine, constructed in 1981, with a maximum capacity of 5.0 tons of iron castings per hour, with emissions controlled by baghouse #16;
(7) One (1) SB-7 Pangborn shot blast machine, constructed in 1978, with a maximum capacity of 6.0 tons of iron castings per hour, with emissions controlled by baghouse #6;
(8) One (1) SB-8 shot blast machine, constructed in 1988, with a maximum capacity of 8.0 tons of iron castings per hour, with emissions controlled by baghouse #16;
(9) One (1) SB-9 shot blast machine, constructed in 1995, with a maximum capacity of 12.5 tons of iron castings per hour, with emissions controlled by baghouse #12;
(10) Grinders GR1 through GR10, GR25, GR 29 and GR30, each with a maximum capacity of 4.0 tons of iron castings per hour, with emissions controlled by baghouse #15;
(11) Grinders GR11 through GR14, GR16 and GR17 each with a maximum capacity of 4.0 tons of iron castings per hour, with emissions controlled by baghouse #16;
(12) Grinders GR19 through GR23 and Grinders 34 through 36 each with a maximum capacity of 4.0 tons of iron castings per hour, with emissions controlled by baghouse #6;
(13) Grinders GR31 through GR33, each with a maximum capacity of 4.0 tons of iron castings per hour, with emissions controlled by baghouse #12.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2] [326 IAC 8-1-6]

In order to render the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 not applicable, the following conditions shall apply:

(a) The PM emissions from each shot blast machine shall be limited to 0.5066 pounds per ton of metal finished.

(b) The PM10 emissions from each shot blast machine shall be limited to 0.5066 pounds per ton of metal finished.

(c) The lead emissions from each shot blast machine shall be limited to 0.0045 pounds per ton of metal finished.

(d) The total finished metal from the entire foundry shall not exceed 112,752 tons of castings finished per twelve consecutive month period.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 do not apply to the new hot box core making process.

D.6.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the following conditions shall apply:

(a) The particulate matter (PM) emissions from each of the shot blast machines SB-1, SB-2, SB-4 and SB-5 shall not exceed 12.1 pounds per hour each, when operating at a process weight rate of 5 tons of iron castings per hour each.

(b) The particulate matter (PM) emissions from each of the shot blast machines SB-3, SB-6, and SB-8 shall not exceed 12.1, 12.1, and 16.5 pounds per hour, respectively, when operating at process weight rates of 5.0, 5.0, and 8.0 tons of iron castings per hour, respectively.

(c) The particulate matter (PM) emissions from shot blast machine SB-7 shall not exceed 13.62 pounds per hour when operating at process weight rate of 6.0 tons of iron castings per hour.

(d) The particulate matter (PM) emissions from baghouse X controlling the shot blast machine SB-9 shall not exceed 22.3 pounds per hour when operating at a process weight rate of 12.5 tons of iron castings per hour.

(e) The particulate matter (PM) emissions from each of the grinders shall not exceed 10.4 pounds per hour when operating at a process weight rate of 4.0 tons of iron castings per hour each.

The pounds per hour limitations were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the baghouses controlling the shotblasters.

Compliance Determination Requirements

D.6.4 Emission Controls

(a) The baghouse #3 for PM control shall be in operation and control emissions from the shotblasters SB-1, SB-2, SB-3, and SB-4 at all times that any one of these shotblasters is in operation.

(b) The baghouse #16 for PM control shall be in operation and control emissions from the shotblasters SB-5, SB-6, and SB-8 at all times that any one of these shotblasters is in operation.

(c) The baghouse #6 for PM control shall be in operation and control emissions from the shotblaster SB-7 at all times that the shotblaster SB-7 is in operation.

(d) The baghouse #12 for PM control shall be in operation and control emissions from the shotblaster SB-9 at all times that the shotblaster SB-9 is in operation.

(e) The baghouse #15 for PM control shall be in operation and control emissions from grinders GR1 through GR10, GR25, GR 29 and GR30 at all times that grinders GR1 through GR10, GR25, GR 29 and GR30 are in operation.

(f) The baghouse #16 for PM control shall be in operation and control emissions from grinders GR11 through GR14, GR16 and GR17 at all times that grinders GR11 through GR14, GR16 and GR17 are in operation.

(g) The baghouse #6 for PM control shall be in operation and control emissions from grinders GR19 through GR23 and Grinders 34 through 36 at all times that grinders GR19 through GR23 and Grinders 34 through 36 are in operation.

(h) The baghouse #12 for PM control shall be in operation and control emissions from grinders GR31 through GR33 at all times that grinders GR31 through GR33 are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.5 Visible Emissions Notations

(a) Visible emission notations of each of the baghouses #3, #6, #16, and #12 stack exhausts shall be performed once per shift during normal daylight hours when exhausting to the atmosphere and when the shotblasters are in operation. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a deviation from this permit.

D.6.6 Baghouse Parametric Monitoring

The Permittee shall record the total static pressure drop across baghouses #3, #6 and #12 used in conjunction with shotblasters, at least once per shift when the associated processes are in operation when venting to the atmosphere. When for any one reading, the pressure drop across either of the baghouses identified as #6 and #12 is outside the normal range of 4.0 and 10.0 inches of water or a range established during the latest stack test, or the pressure drop across the baghouse identified as #3 is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Failure to Take Response Steps. A pressure reading that is above the above mentioned maximum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.6.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the shotblasters. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.6.8 Broken or Failed Bag Detection

In the event that bag failure has been observed.

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.9 Record Keeping Requirements

(a) To document compliance with condition D.6.1 (d), the source shall maintain record of the total metal finished per month.

(b) To document compliance with Condition D.6.5, the Permittee shall maintain records of visible emission notations of the baghouse #3, #16, #6, and #12 stack exhausts once per shift when exhausting to the atmosphere and when the blasters are in operation.

(c) To document compliance with Condition D.6.6, the Permittee shall maintain records of the total static pressure drop once per shift when the associated processes are in operation when venting to the atmosphere.

(d) To document compliance with Conditions D.6.7, the Permittee shall maintain records of the results of the inspections required under Condition D.6.7.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit

D.6.10 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.6.1 (d) shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).